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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,217	07/15/2005	Takao Shimizu	SAE-0036	6601

23353 7590 07/19/2007
RADER FISHMAN & GRAUER PLLC
LION BUILDING
1233 20TH STREET N.W., SUITE 501
WASHINGTON, DC 20036

EXAMINER

LI, RUIXIANG

ART UNIT	PAPER NUMBER
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1646

MAIL DATE	DELIVERY MODE
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07/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/542,217

Applicant(s)

SHIMIZU ET AL.

Examiner

Ruixiang Li

Art Unit

1646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 4-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/15/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Sequence alignment.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :07/15/2005, 09/23/2005, 01/18/2006, 03/15/2007.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-3, in the reply filed on 06/01/2007 is acknowledged. The traversal is on the ground(s) that the examination of the claims Groups I-II poses no burden on the examiner. Citing MPEP803, Applicants argue that if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions. This is not found to be persuasive because Groups I-II are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept as set forth in the previous office action. Thus, unity of invention is lacking and restriction is appropriate. Moreover, search of the product of Group I does not necessarily reveal the prior art for a method of using the product of Group II. Search and consideration of more than one invention groups constitute an undue burden on the office.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-8 are pending. Claims 1-3 are currently under consideration. All other claims are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

Information Disclosure Statement

3. The information disclosure statements filed on 07/15/2005, 09/23/2005, 01/18/2006, and 03/15/2007 have been considered by the examiner.

Drawings

4. The drawings filed on 07/15/2005 are accepted by the Examiner.

Objection to Title

5. The title of the invention is objected to because of the use of the word “novel”, which begs the novelty of issued U. S. Patents. Any invention, when patented, is novel. There is no need to say it again in the title. It is suggested that the word “novel” be deleted from the title.

Claim Rejections—35 U.S.C. § 101

6. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-3 are rejected under 35 U.S.C. 101 because the claims invention is directed non-statutory subject matter.

Claims 1-3, as written, do not sufficiently distinguish over a peptide that exists naturally because the claims do not particularly point out any non-naturally occurring differences between the claimed products and the naturally occurring products. In the absence of the hand of man, the naturally occurring products are considered non-statutory subject matter. See *Diamond v. Chakrabarty*, 447 U.S. 303, 206 USPQ 193 (1980). The claims should be amended to indicate the hand of the inventor, e.g., by insertion of “isolated” or “purified”. See MPEP 2105.

Claim Rejections—35 U.S.C. § 112, 2nd paragraph

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1 and 2 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "p2y9". Such a term is determined arbitrarily without a definitive structure. Others in the field may isolate the same protein and give an entirely different name. Thus, claiming biochemical molecules by a particular name given to the protein by various workers in the field fails to distinctly claim what the protein is. Applicants should particularly point out and distinctly claim the p2y9 protein by claiming characteristics associated with the protein, such as a sequence identifier.

Claim 2 is rejected as dependent claims from claim 1.

Claim Rejections—35 U.S.C. §102 (b)

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being unpatentable over Sathe et al. (US Patent No. 6,010,877, Jan. 4, 2000).

Sathe et al. teach an isolated polypeptide (SEQ ID NO: 2) that is 100% identical to the polypeptide of SEQ ID NO: 1 of the present invention (see sequence alignment attached to the office action). Sathe et al. do not teach the polypeptide acts as a lysophosphatidic acid receptor. However, such a property is inherent to the structure of the polypeptide. Thus, the teachings of Sathe et al. meets the limitations of claims 1-3.

Claim Objections—Minor Informalities

12. Claim 3 is objected to because it uses an indefinite article to refer to a unique sequence; “an amino acid sequence” should be amended to “the amino acid sequence”. Appropriate correction is required.

Conclusion

13. No claims are allowed.

Advisory Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruixiang Li whose telephone number is (571) 272-0875. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Nickol, can be reached on (571) 272-0835. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 1646

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at the toll-free phone number 866-217-9197.



Ruixiang Li, Ph.D.
Primary Examiner
July 13, 2007

RUIXIANG LI, PH.D.
PRIMARY EXAMINER

ALIGNMENTS

US-08-781-250-2

; Sequence 2, Application US/08781250

; Patent No. 6010877

; GENERAL INFORMATION:

; APPLICANT: Sathe, Ganesh

; APPLICANT: Van Horn, Stephanie

; APPLICANT: Bergsma, Derk

; APPLICANT: Mao, Joyce Yue

; TITLE OF INVENTION: cDNA CLONE HE8CS41 THAT ENCODES A NOVEL 7-
TRANSMEMBRAN

; NUMBER OF SEQUENCES: 2

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: SmithKline Beecham

; STREET: 709 Swedeland Road

; CITY: King of Prussia

; STATE: PA

; COUNTRY: USA

; ZIP: 19406

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: DOS

; SOFTWARE: FastSEQ for Windows Version 2.0

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/781,250

; FILING DATE: 10-JAN-1997

; CLASSIFICATION: 514

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER:

; FILING DATE:

; ATTORNEY/AGENT INFORMATION:

; NAME: William T. Han,

; REGISTRATION NUMBER: 34,344

; REFERENCE/DOCKET NUMBER: ATG50043

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 610-270-5219

; TELEFAX: 610-270-4060

; TELEX:

; INFORMATION FOR SEQ ID NO: 2:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 370 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: protein

US-08-781-250-2

Query Match 100.0%; Score 1912; DB 2; Length 370;

Best Local Similarity 100.0%; Pred. No. 1.6e-140;

Matches 370; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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          |||
Db      1 MGDRRFIDFQFQDSNSSLRPRLG NATANNTCIVDDSFKYNLNGAVYSVVFILGLITNSVS 60

Qy     61 LFVFCFRMKMRSETAIFITNLAVSDLLFVCTLPFKIFYNFNRHWPFGDTLCKISGTAFLT 120
          |||
Db     61 LFVFCFRMKMRSETAIFITNLAVSDLLFVCTLPFKIFYNFNRHWPFGDTLCKISGTAFLT 120

Qy    121 NIYGSMFLTLCISVDRFLAIVYPFRSRTIRTRNSAIVCAGVWILVLSGGISASLFSTTN 180
          |||
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Db	121	NIYGSMFLTCISVDRFLAIVYPFRSRTIRTRNSAIVCAGVWILVLSGGISASLFSTTN	180
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Db	181	VNNATTTCFEGFSKRVWKTYLSKITIFIEVVGFIIPILNVSCSSVVLRTLRLKPATLSQI	240
Qy	241	GTNKKKVLKMITVHMAVFVVCVFPYNSVLFLYALVRSQAITNCFLERFKIMYPITLCLA	300
Db	241	GTNKKKVLKMITVHMAVFVVCVFPYNSVLFLYALVRSQAITNCFLERFKIMYPITLCLA	300
Qy	301	TLNCCFDPFIYYFTLESFQKSFYINAHIRMESLFKTETPLTTKPSLPAIQEEVSDQTTNN	360
Db	301	TLNCCFDPFIYYFTLESFQKSFYINAHIRMESLFKTETPLTTKPSLPAIQEEVSDQTTNN	360
Qy	361	GGELMLESTF	370
Db	361	GGELMLESTF	370